23 November 2005

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NOV 2 8 2005 FCC - MAILFROOM

Marlene H. Dortch Office of the Secretary Federal Communications Commission 445 12th Street, S.W., Washington, DC 20554

RE: Compliance Filing for E911 Requirements for IP-Enabled Services, WC Docket 05-196.

VIA 2nd DAY MAIL

Dear Secretary Dortch:

Please find enclosed the original and four copies of the compliance filing for Broadwing Communications LLC in the above captioned docket. If there are any questions regarding this filing please feel free to contact me at 312-895-8272. Thank you.

Sincerely,

Daniel Meldazis

Director Regulatory Affairs

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November 28, 2005

Marlene H. Dortch Office of the Secretary Federal Communications Commission 445 12th Street, S.W., Washington, DC 20554 NOV 2 8 2005

Re: Compliance Letter for *E911 Requirements for IP-Enabled Services*, WC Docket No.05-196

Dear Secretary Dortch:

Broadwing Communications LLC ("Broadwing") hereby submits its Compliance Letter demonstrating its compliance with the Commission's 911 requirements for interconnected VOIP service providers in the above captioned matter. Broadwing is a local and long distance carrier primarily providing voice and data services to Wholesale and Enterprise customers. Broadwing introduced its first VOIP service offering in June of 2005 for Enterprise customers. As will be described in greater detail below, the Broadwing VOIP service is limited to a fixed location and, therefore, all of the Commission's concerns about 911 access by nomadic users of VOIP service does not exist. Broadwing is able to support 911 for this VOIP application using the same means and to the same technical degree that it provides 911 access for all of its local wire line customers. For ease of presentation, this Compliance Letter tracks, where practical, the Enforcement Bureau's outline for this submittal contained in the Commission's November 7, 2005 Public Notice.

Broadwing's VOIP Service Offering

The Broadwing VOIP service is provided to Enterprise customers only who operate a PBX. The PBX may already be capable of transmitting an IP signal but more than likely it transmits traffic in a TDM format. Broadwing provides the customer with an Integrated Access Device ("IAD") for the trunk side of the customer's PBX which converts the signal from the PBX to IP for outbound traffic and from IP to TDM for inbound traffic back to the PBX. For outbound calls, the IP converted call is routed to Broadwing's

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¹ The IAD is owned and operated by the customer and as such constitutes CPE. Broadwing's service is an "Interconnected VOIP service" only because the service "requires Internet protocol-compatible customer premises equipment ..." See November 7, 2005 Public Notice.



soft switch and then to one of Broadwing's media gateways where it is converted back to TDM and routed to the Broadwing local switch serving the customer's local market. Local calls would then be handed to the appropriate LEC/CLEC for termination; long-distance calls are switched to the Broadwing long-distance network and terminated as a standard long-distance call. For inbound calls, calls are delivered from the originating LEC/CLEC to the serving Broadwing local switch as TDM via standard local or long-distance trunks. The local switch delivers the call to the appropriate media gateway in the Broadwing VOIP network, which converts the call from TDM to IP. Broadwing's soft switch routes the call to the IP address of the appropriate IAD, which terminates the call back to TDM for delivery to the customer's PBX.

All of the end users of Broadwing's VOIP service are tethered to the PBX and have no more mobility than do customers utilizing a PBX which is interconnected to any TDM based wire line network.

911 Solution

Broadwing is providing 911 access to 100% of its Enterprise customers using this VOIP service and all of their end users. Because the location of the PBX is fixed – just as it is for wire line applications provided to other PBX customers - Broadwing utilizes the same well-established wire line methods and procedures for routing 911 calls to the appropriate PSAP. And because no end user can use the service other than when tethered to the PBX there is only a need to do the 911 network programming to route calls to the PSAP servicing the geographic area where the PBX is located only once. An end user dialing 911 will have the call routed in the same manner as any other VOIP call as described above. Once the 911 call reaches the Broadwing soft switch it is translated to a pseudo local number serving the customer's local calling area and routed to the appropriate Broadwing local switch and then, based on the dialing party's number and the rate center location that the number is assigned to, the 911 call is routed to a selective router maintained by the incumbent local exchange carrier. The selective router determines the PSAP that the call should be sent to for answering. The Automatic Number Identification (ANI) is sent along with the 911 call and the PSAP will access a database in order to match the ANI with the Automatic Location Identification (ALI) information. The ALI information will populate the PSAP operator's screen with the location of the customer calling 911 as the operator answers the call.

Obtaining Initial Registered Location Information

Just as in the case of any non-VOIP PBX application, the registered location is the physical location of the PBX. This information is obtained from the customer as part of the initial order taking process. PBX customers are frequently assigned a block of telephone numbers even if all of the numbers are not immediately activated. All of the telephone numbers reserved by the customer, active and inactive, are entered into the 911 database by Broadwing as part of the initial order taking process. This is the same process that Broadwing uses for all of the local exchange services that it provides which are the subject to state 911 requirements.

Obtaining Updated Registered Location Information

The physical location of the PBX rarely changes; therefore, there is not an ongoing and continual need to update the registered location. Should the customer physically want to change the location of their PBX and keep its current telephone numbers, the customer must submit a service change order to Broadwing. Broadwing would then update the appropriate 911 databases as part of the change order execution. Relocation of a PBX is a complicated matter that could never be accomplished by a customer without the knowledge and cooperation of its telecommunications carrier so Broadwing would always be aware if a change in location were to occur.

Technical Solution for Nomadic Subscribers

There are no nomadic subscribers associated with Broadwing's current VOIP service.

Miscellaneous

Broadwing has required each of its customers to sign an acknowledgement as part of the order taking process that they understand all relevant limitations to 911 access. The acknowledgement form is appended to the customer contract so that it is executed at the same time that the customer executes the underlying service agreement. A copy of the acknowledgement form is attached to this submittal. The acknowledgement notes three potential limitations to 911 access;

- 1) Unavailability of E911 access generally in the customer's geographic area;
- 2) Customer's equipment not maintained or configured correctly to route 911 calls;
- 3) Power interruption to customer's equipment.

None of these limitations are unique to Broadwing's VOIP service – they apply to any local wire line application supporting a PBX. Broadwing also provides each customer with a Welcome Letter which is included with the packaging for the IAD. A copy of the Welcome Letter is attached to this submittal. The Welcome Letter, among other things, reminds customer of the impact of a power interruption on accessing 911 and includes warning stickers for customers to distribute to end users. The sticker reads;

"VOIP service requires customer provided power source to operate. Power failure will prevent access to 911."

Broadwing intends to offer additional VOIP products and services from time to time. As the introduction of any additional VOIP services impacts the representations contained in the Compliance Letter Broadwing will file appropriate modifications.

Respectfully submitted,

John C Gockley,

Vice President & Associate General Counsel

ACKNOWLEDGMENT OF E911 ADVISORY

CUSTOMER:	("Customer").
Customer and Broadwing Communications, LLC ("Broadw	ing") are parties to that certain Short-Form Service Agreement
dated as of (the "Agreement"	").
provide E911 functionality to Customer provided that: (1) I Customer location where the Service will be deployed; (2) equipment to properly route calls placed to 911; and (3) Customer and receiving uninterrupted power at all times. The Service is the PSAP is not capable of receiving enhancements. Notwithstawill indemnify and hold Supplier harmless from and again reasonable attorney's fees) arising directly from any death extent such claim, loss or expense arises from the failure of the supplier harmless.	ND ACKNOWLEDGES RECEIPT OF THIS NOTICE OF
[Enter full Customer name & other information as indicated]	
By:	<u>_</u>
Name:	_
Title:	_
Date:	_
Full Business Address:	_
Telephone: Facsimile:	



Thank you for selecting Broadwing's Voice over IP

(VoIP) Integrated Access service. Broadwing delivers a powerful and flexible voice and data bundle for enterprises by combining critical business applications enterprises by combining critical business applications enterprises by combining critical business applications enterprises by combining critical business like voice VPNs. Edling with powerful new features like voice VPNs. And because it works with your existing pBX and LAN. And because it works with your existing pBX and LAN. And because it works with your existing pBX and LAN. And because it works with your existing pBX and LAN. And because it works with your existing pBX and LAN. And because it works with your existing pBX and LAN. And because it works with your existing pBX and LAN. And because it works with your existing pBX and LAN. And because it works with your existing pBX and LAN. And because it works with your existing pBX and LAN. And because it works with your existing pBX and LAN. And because it works with your existing pBX and LAN. And because it works with your existing pBX and LAN. And because it works with your existing pBX and LAN. And because it works with your existing pBX and LAN. And because it works with your existing pBX and LAN.

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ABOUT THIS DOCOMENT - GETTING STARTED QUICKEY

This document provides quick instructions for installing, cabling, and configuring the Cisco 2431-T1 Integrated Access Device (IAD). More detailed instructions on these activities can be found in the Cisco Quick Start Guide shipped with the IAD.

Please retain this document for your reference when the IAD arrives.

CERCO RABILLI INTEGRATED ACCESS DEVICE

Shipping to you shortly is the Cisco 2431-T1 Integrated Access Device (IAD), one of the key elements of Broadwing's VoIP solution. The 2431 IAD performs the following critical functions:

- · Termination of the T1 circuit connecting your network to Broadwing's
- Ethernet connectivity to your LAN
- T1 CAS or PRI connectivity to your PBX
- Conversion of standard voice communications from your PBX to VoIP for delivery to
- Broadwing's network (and vice versa) Prioritization of voice traffic, ensuring great sounding voice calls

THE BROADWING SERVICE PROVISIONING PROCESS

Broadwing configures and ships IADs in advance of the availability of services to customers. When the Cisco IAD is delivered to you, network and service provisioning by Broadwing and its access vendor will not have been completed. Although the IAD will arrive pre-configured, you will not have IP or voice network connectivity through the IAD until provisioning is complete.

In the next few days you will receive additional information from Broadwing confirming the completion of network provisioning and scheduling a service test and turn-up appointment. You must complete the IAD installation steps below, and have your PBX ready to place and receive calls through the VoIP service, before your test and turnup appointment.



QUIE INSTALLATION GUIDE

1. Install the chassis

The Cisco 2431 IAD can be rack-, wall-, or surface-mounted. Full details on securely mounting and grounding the chassis can be found in the Cisco Quick Start Guide, enclosed with the IAD.

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	Port Label	Connected To	Cable	
1	T1/E1 1/1	PBX	RJ-48 T1 cable (straight-through or cross-over)
2	T1/E1 1/0	WAN	RJ-48 T1 cable (straight-through)	
3	Fast Ethernet 0/0	LAN	RJ-45 FastE cable (straight-through)	
4	AC power	100-240 VAC, 50-60 Hz	Power cord	

NOTE: Your kit contains one 20-foot Cat-5 Ethernet cable and three 20-foot T1 cables (one cross-over, two straight-through). Cable requirements over 20 feet are your responsibility.

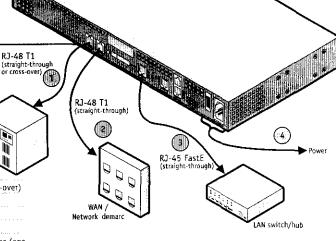


Figure 1: IAD Ports, Cables, Connections (rear view of 2431-T1)

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- State Connect the straight-through Fast Ethernet cable (provided) to Fast Ethernet port 0/0 on the IAD.
- Connect the straight-through Fast Ethernet cable to an available port on the hub, router or switch for your LAN.

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- Stead Connect a straight-through RJ-48 T1 cable (provided) to the T1 WAN port (port T1/1E1 1/0) on the IAD.
- Standard Connect the RJ-48 T1 cable to a jack at the network demarcation device (telco demarc or equivalent).

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State . Connect an RJ-48 T1 to the T1 PBX port (port T1/E1 1/1) on the IAD. NOTE: Depending on the requirements of your PBX, either a straight-through or cross-over T1 cable may be required. One of each has been included in this kit.

Connect the RJ-48 T1 cable to the appropriate port in the digital telephone equipment (PBX).

3. Power On the Cisco IAD

1.0

You are ready to power on the Cisco IAD if it meets these requirements:

- The chassis is securely mounted.
- Power and interface cables are connected.

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- Move the Cisco IAD power switch to the ON position.
- The green LED on the right half of the rear of the IAD should go on and the fan should operate.
- It is not necessary to keep the IAD powered until you begin test and turn-up with Broadwing.

4. Next Steps

- Your IAD will arrive configured with the WAN, LAN, and telephony settings specified on your order. No additional IAD configuration should be required. You will not have IP or voice network connectivity until Broadwing completes testing and turn-up on your circuit, even if you have completed the steps in this document.
- Broadwing will contact you in the near future to notify you that your local circuit has been delivered and to schedule your test and turn-up appointment.
- You must complete the configuration and setup of your PBX to connect to the IAD and use Broadwing's service prior to
 you test and turn-up appointment. Broadwing will not be able to complete your service provisioning unless we can place
 test calls to your PBX and receive calls from your PBX through the VoIP circuit and IAD. If your PBX is not configured
 at the time of your appointment, Broadwing may require you to reschedule the appointment for a later date.





Broadwing Responsibilities

- Coordinate delivery of pre-configured IAD (if ordered from Broadwing)
- Order and manage the completion of the local circuit
- Provision IP and VoIP network for Internet access and voice services
- Schedule a meeting with you for test and turn-up
- Ensure Internet access and your ability to make and receive calls during test and turn-up

Your Responsibilities

Prior to your test and turn-up appointment:

- Install your IAD, using the instructions in this Guide
- Configure your PBX to use VoIP Integrated Access service

During your test and turn-up appointment:

- · Be available to test Internet access with Broadwing
- Be available to place and receive test calls with Broadwing
- Have appropriate personnel available to assist with troubleshooting Internet access/LAN and voice/PBX issues

After your test and turn-up appointment:

- Obtain alternate source of power in case of power outage to ensure availability of 911 service, and/or notify personnel of risks
- Place change orders with Broadwing for configuration changes
- \bullet Manage configuration changes in your IAD and PBX after test and $t_{urn\text{-}up}$

Frequently Asked Questions

What do I do next?

After you have completed the installation steps in this document, you must configure your PBX to connect to the IAD and use the VoIP circuit. You will be notified by Broadwing when your local circuit has been delivered and ready for testing. Broadwing will contact you to set up a test and turn-up appointment at a convenient time. You must complete your PBX configuration prior to this appointment.

What do I need to do if I want to make changes to my service after the sincturn-up?

You will need to place a change order through your Broadwing sales team. Broadwing will then provision the requested changes in our network.

Please note: many changes – including adding or deleting telephone numbers to the service – also require a configuration change to your IAD. You are solely responsible for all configuration changes to the IAD after initial test and turn-up.

thes Broadwing's Voll' Integrated Access product support vill calling:

Yes, it does. Broadwing will connect 911 calls to the emergency services center for your physical location, with the same capabilities as a standard voice trunk.

Please note that Broadwing's VoIP service requires electrical power to the Cisco 2431 IAD (and any other telephony devices on your premises, such as the PBX). In the event of a power outage at your location, you and your customers will not be able to make or receive calls, including 911 calls, unless backup power has been provided to the IAD.

Broadwing has provided you a set of informational labels to be placed on devices connected to the VoIP service, to make users aware that 911 services may not be available in the case of a power outage. If you require more labels, please contact Broadwing and more can be provided.



www.broadwing.com



www.cisco.com